GOVERNMENT OF INDIA
MINISTRY OF COMMERCE AND INDUSTRY

PTC.246 (N)
500

सत्यमेव जयते

REPORT

OF THE

TARIFF COMMISSION

ON THE CONTINUANCE OF PROTECTION TO THE

FERRO-SILICON INDUSTRY

सत्यमेव जयते

BOMBAY
1953

PRINTED IN INDIA FOR THE MANAGER, GOVERNMENT OF INDIA PUBLICATIONS
BRANCH, DELHI BY THE MANAGER GOVT. OF INDIA PHOTO-LITHO PRESS, NEW DELHI

PERSONNEL OF THE COMMISSION

Mr. M.D. Bhat	*Chairman*
Dr. B.V. Narayanaswamy Naidu, M.A., B.Com., Ph.D., Bar-at-Law	*Member*
Mr. B.N. Adarkar, M.A. (Cantab.)	*Member*
Mr. B.N. Das Gupta, B.A., A.S.A.A. (London), F.C.A.	*Member*
Mr. C. Ramasubban	*Member*
Dr. D.K. Malhotra, M.A., Ph.D.	*Secretary*

PERSONNEL OF THE PANEL WHICH HEARD THE CASE

Dr. B.V. Narayanaswamy Naidu	*Member*
Mr. B.N. Adarkar	*Member*
Mr. B.N. Das Gupta	*Member*

सत्यमेव जयते

GOVERNMENT OF INDIA
MINISTRY OF COMMERCE AND INDUSTRY

New Delhi, the 28th November, 1953.

RESOLUTION
(Tariffs)

No. 17(1)-T.B./53.- The Tariff Commission has submitted its report on the continuance of protection to the Ferro-silicon Industry. The Commission has referred to the progress made by the Industry both in its rated capacity and in actual production while the quality of indigenous ferro-silicon is generally satisfactory. The fair ex-works price of the indigenous product is, according to them, lower than the landed cost without duty of the imported product. They have also determined the fair selling prices, f.o.r. Bhadravati, of different grades of ferro-silicon.

2. The Commission's principal recommendations are:-

(1) Protection granted to the Ferro-silicon Industry need not be continued beyond the 31st December, 1953. If, at any time, the industry finds itself unable to meet foreign competition, it may apply to Government for a fresh examination of its case;

(2) Government should fix ceiling prices of ferro-silicon of different grades, F.O.R. Bhadravati, as specified below:

Grade		Rs. per ton
75/80%	lump	890
	powder	845
70/75%	lump	820
	powder	779

Grade	Rs. per ton
60/70% lump	663
powder	630
45/50% lump	466
powder	443

3. Government accept the recommendations of the Tariff Commission.

L.K. JHA,

Joint Secretary to the Government of India.

सत्यमेव जयते

LIST OF THE REPORTS OF THE INDIAN TARIFF BOARD PUBLISHED BY THE MANAGER OF PUBLICATIONS, DELHI

I. TARIFF INQUIRIES

(A) *New Cases*

1.	Sodium Thiosulphate, sodium sulphite (anhydrous) and sodium bisulphite (1946)	PTB	158
2.	Bichromates (1946)	PTB	157
3.	Phosphates and phosphoric acid (1946)	PTB	156
4.	Butter colour and aerated water powder colour (1946)	PTB	154
5.	Calcium chloride (1946)	PTB	153
6.	Coated abrasives (other than grinding wheels) (1946)	PTB	159
7.	Hurricane Lanterns (1946)	PTB	152
8.	Cocoa powder and chocolate (1946)	PTB	155
9.	Wood screws (1946)	PTB	99
10.	Bicycles (1946)	PTB	100
11.	Caustic soda and bleaching powder (1946)	PTB	88
12.	Antimony (1946)	PTB	94
13.	Sewing machines (1947)	PTB	101
14.	Aluminium (1946)	PTB	90
15.	Steel baling hoops (1946)	PTB	87
16.	Grinding Wheels (1946)	PTB	93
17.	Preserved fruits (1946)	PTB	145
18.	Non-ferrous metals (1946)	PTB	146
19.	Cotton textile machinery (ring frames, spindles and spinning rings) (1947)	PTB	111
20.	Rubber manufactures (1947)	PTB	110
21.	Sodium and potassium metabisulphites (1947)	PTB	105
22.	Alloy tool and special steel (1947)	PTB	118
23.	Sodium sulphide (1947)	PTB	102
24.	Electric Motors (1947)	PTB	112
25.	Dry battery (1947)	PTB	115
26.	Plywood and teachests (1947)	PTB	113
27.	Cotton and hair belting (1947)	PTB	121
28.	Starch (1947)	PTB	103
29.	Glucose (1947)	PTB	104
30.	Chloroform, ether sulphuric p.b. and anaesthetic and potassium permanganate (1947)	PTB	109
31.	Fire hose (1947)	PTB	120
32.	Steel belt lacing (1947)	PTB	119
33.	Ferro-silicon (1947)	PTB	116
34.	Stearic acid and oleic acid (1947)	PTB	117
35.	Machine tools (1947)	PTB	114
36.	Wire healds (1948)	PTB	123
37.	Pickers (1948)	PTB	125
38.	Motor vehicle batteries (1948)	PTB	122
39.	Hydraulic brake fluid (1948)	PTB	129
40.	Bobbins (1948)	PTB	128

41.	Slate and slate pencils (1949)	PTB	138
42.	Expanded metals (1949)	PTB	150
43.	Cotton textile machinery (ring frames, spindles, spinning rings and plain looms) (1949)	PTB	167
44.	Small tools (1949)	PTB	149
45	Plastics (1949)	PTB	160
46.	Soda ash (1949)	PTB	165
47.	Glass and glassware (1950)	PTB	174
48.	Sterilised surgical catgut (1950)	PTB	184
49.	Liver extract (1950)	PTB	185
50.	Fountain pen ink (1950)	PTB	183
51.	Pencils (1950)	PTB	187
52.	Fine chemicals (1950)	PTB	182
53.	Sago (1950)	PTB	186
54.	Belt fasteners (1950)	PTB	189
55.	Electric brass lamp holders (1950)	PTB	192
56.	Oil pressure lamps (1950)	PTB	188
57.	Hydroquinone (1951)	PTB	202
58.	Buttons (1951)	PTB	191
59.	Milk powder (1951)	PTB	203
60.	Copper sulphate (1951)	PTB	204
61.	Machine screws (1951)	PTB	207
62.	Zip fasteners (1951)	PTB	211
63.	Electric Fans (1951)	PTB	212

(B) *Review Cases*

1.	Iron and steel manufacturers (1947)	PTB	106
2.	Paper and paper pulp (1947)	PTB	108
3.	Cotton textile manufactures (1947)	PTB	98
4.	Sugar (1947)	PTB	107
5.	Magnesium chloride (1948)	PTB	124
6.	Silver thread and wire (1948)	PTB	126
7.	Bicycles (1949)	PTB	131
8.	Artificial silk (1949)	PTB	132
9.	Sericulture (1949)	PTB	133
10.	Alloy tool and special steel (1949)	PTB	136
11.	Sodium thiosulphate, sodium sulphite and sodium bisulphite (under section 4(1) of the Tariff Act) (1949)	PTB	140
12.	Calcium chloride (1948)	PTB	148
13.	Grinding wheels (under section 4(1) of the Tariff Act) (1949)	PTB	141
14.	Hurricane lanterns (under section 4(1) of the Tariff Act) (1949)	PTB	144
15.	Sugar (1949)	PTB	134
16.	Preserved fruits (1949)	PTB	143
17.	Coated Abrasives (under section 4(1) of the Tariff Act) (1949)	PTB	147
18.	Antimony (1949)	PTB	161
19.	Phosphates and phosphoric acid (1949)	PTB	164
20.	Starch (1949)	PTB	163
21.	Bichromates (1949)	PTB	168
22.	Ferro-silicon (1949)	PTB	169

23. Sewing machines (1949)	PTB	170
24. Cocoa powder and chocolate (1949)	PTB	172
25. Electric motors (1949)	PTB	166
26. Steel belt lacing (1949)	PTB	171
27. Cotton and hair belting (1949)	PTB	173
28. Calcium chloride (1950)	PTB	175
29. Sugar (1950)	PTB	179
30. Potassium permanganate (1950)	PTB	176
31. Wood screws (1950)	PTB	177
32. Dry battery (1950)	PTB	180
33. Stearic acid and oleic acid (1950)	PTB	178
34. Plywood and teachests (1950)	PTB	181
35. Preserved fruits (1951)	PTB	198
36. Caustic soda and bleaching powder (1951)	PTB	193
37. Soda Ash (1951)	PTB	200
38. Cotton textile machinery (1951)	PTB	201
39. Pickers (1951)	PTB	196
40. Aluminium (1951)	PTB	195
41. Artificial silk and cotton and artificial silk mixed fabric (1951)	PTB	197
42. Canned and bottled vegetables (1951)	PTB	206
43. Sericulture (1951)	PTB	215
44. Alloy tool and special steel (1951)	PTB	214
45. Sodium thiosulphate, sodium sulphite and sodium bisulphite (1951)	PTB	216
46. Grinding wheels (1951)	PTB	213
47. Starch (1951)	PTB	209

II. PRICE REPORTS

1. Cotton yarn and cloth prices (1948)	PTB	127
2. Paper prices (1948)	PTB	130
3. Fair ex-works prices of superphosphates (1949)	PTB	139
4. Fair retention prices of steel produced by Tatas and Scob (1949)	PTB	135
5. Ex-works costs of hot metal (iron for steel making) and fair ex-works prices of pig iron (Basic and foundry grade) (1949)	PTB	137
6. Fair retention prices of steel produced by Mysore Iron & Steel Works, Bhadravati (1949)	PTB	151
7. Fair retention prices of steel produced by the Tata Iron & Steel Co. and the Steel Corporation of Bengal (1951)	PTB	205
8. F. r. p. of Tinplate produced by the Tinplate Co. of India Ltd. (1950)	PTB	190
9. Revision of fair prices of superphosphate (1951)	PTB	210
10. Revision of fair prices of superphosphate (July-December 1951)	PTB	194
11. Raw rubber prices (1951)	PTB	199
12. Fair retention prices, ex-works, of pig iron (1951)	PTB	208

सत्यमेव जयते

TARIFF COMMISSION'S REPORTS

1.	Mysore Iron and steel prices (1952)	PTB	217
2.	Motor vehicle battery (1952)	PTC	218
3.	Woollen hosiery (1952)	PTC	219
4.	The f.r.p. of steel produced by the SCOB (1952)	PTC	222
5.	Review of retention prices of tinplate (1952)	PTC	221
6.	Fair ratio between the ordinary shares of SCOB and IISCO (1952)	PTC	225
7.	Ball bearings and steel balls (1952)	PTC	220
8.	Automobile industry (1953)	PTC	232
9.	Fair prices of superphosphates 1st January to 15th August, 1952	PTC	228
10.	Revision of prices of raw rubber (1952)	PTC	223
11.	Reduction of import duty on meta-aminophenol used in the manufacture of para-aminosalicylic acid (1952)	PTC	229
12.	Flax goods industry (1953)	PTC	230
13.	Power and distribution transformers (1952)	PTC	224
14.	Conversion charges for bars and rods and the fair retention price of electric furnace billets produced by the registered re-rollers (1952)	PTC	226
15.	Automobile manufacture in India (1953)	PTC	242
16.	Glucose (1953)	PTC	231

सत्यमेव जयते

CONTENTS

Para.		Page
1.	Previous Tariff inquiries	1
2.	Implementation of Tariff Board's recommendations.	2
3.	Present inquiry	3
4.	Method of inquiry	3
5.	Domestic demand	4
6.	Rated capacity	6
7.	Domestic production	6
8.	Quality of the indigenous product	7
9.	Imports and import control	7
10.	Existing rate of protective duty	8
11.	Commission's estimate of cost of production	8
12.	Revised pattern of prices	16
13.	C.i.f. prices and landed costs	18
14.	Comparison of the landed cost of the imported product with the Commission's estimate of fair selling price of the indigenous product.	19
15.	Question of continuance of protection	20
16.	Summary of conclusions and recommendations	21
17.	Acknowledgments	22

APPENDICES

I	List of persons, firms or other organisations to whom the Commission's questionnaires were issued and from whom replies or memoranda were received.	23
II	List of persons who attended the public inquiry held on 10th August, 1953.	26
III	Statement showing imports of ferro-silicon from 1949-50 (September-March) to 1952-53.	27
IV	Statement showing the c.i.f. prices and landed costs of ferro-silicon.	28

REPORT ON THE CONTINUANCE OF PROTECTION TO THE FERRO-SILICON INDUSTRY

Previous Tariff Inquiries.

1. The claim of the ferro-silicon industry to protection or assistance was first referred to the Tariff Board by the Government of India in the Department of Commerce by their Resolution No. 218-T(55)/46 dated 12th October, 1946 and the Board after investigation submitted its Report on 18th June, 1947. The Board's main recommendation that the industry should be granted protection by converting the then existing revenue duty of 18$\frac{3}{4}$ per cent *ad valorem* into a protective duty at the same rate for the period ending 31st March, 1950 was accepted by Government. As the period of protection was due to expire on 31st March, 1950, the Tariff Board conducted another inquiry into the question of continuance of protection and submitted a report to Government on 1st November, 1949, with the following recommendations:-

(1) that the then existing scheme of protection should be extended upto March 31, 1951, namely, (a) a protective duty of 18$\frac{3}{4}$% *ad valorem* on imports; and (b) the obligation imposed on every importer to purchase from the indigenous manufacturer twice the quantity licensed for imports;

सत्यमेव जयते

(2) that the above restriction on imports should be made applicable to all grades of ferro-silicon manufactured in India;

(3) that the whole question of protection including import control should be reviewed after the new plant to be set up by the Mysore Iron and Steel Works at Bhadravati came into full production in 1950; and

(4) that Government should fix ceiling prices of ferro-silicon of different grades f.o.r. Mysore as specified below:

Grade	*Rs.* per ton
75-80%	840
70-75%	768
60-70%	673
45-50%	505
20-25%	270

Recommendations (1) (a), (3) and (4) were accepted by Government by the Ministry of Commerce Resolution No. 17(8)TB/49 dated 31st December, 1949. As regards recommendations (1) (b) and (2), they were also accepted so long as the restrictions indicated therein were warranted by balance of payments considerations.

2. The recommendations made by the Tariff Board in its 1949 Report have been implemented to the extent indicated below:-

Implementation of Tariff Board's recommendations.

Recommendations (1)(a) and (3): The protective duty of 18¾% *ad valorem* was continued upto 31st March, 1951. Subsequently, pending a detailed inquiry into the industry, the Government of India, on the recommendation of the Tariff Board, extended the period of protection upto 31st December, 1952, by the Indian Tariff (Amendment) Act, 1952. With the imposition of a surcharge of 5 per cent. under the Finance Act, 1951, the protective duty was raised to 19 11/16 per cent. *ad valorem* with effect from 1st April, 1951. As a detailed inquiry could not be held in 1952, the period of protection was further extended, on the recommendation of the Tariff Commission, upto 31st December, 1953 by the Indian Tariff (Fourth Amendment) Act, 1952.

Recommendations (1) (b) and (2): The restrictions on imports have been continued as recommended by the Board.

Recommendation (4): The Mysore Iron & Steel Works have maintained their prices of ferro-silicon at the ceilings fixed by the Board in 1949 and accepted by the Government by the Resolution No. 17(8)TB/49 dated 31st December, 1949.

Present inquiry.

3. The protection granted to the industry is due to expire on 31st December, 1953. The Commission has, therefore, undertaken the present inquiry under Section 11(e) read with Sections 13 and 15 of the Tariff Commission Act, 1951, which empower the Commission to investigate into the working of protection granted to an industry and to recommend any further action required, with a view to increase, decrease, modification or abolition of the protection according to the circumstances of the case.

Method of inquiry.

4. (a) A special questionnaire was issued on 31st March, 1953, to the Mysore Iron & Steel Works, Bhadravati, the only producer of ferro-silicon in the country. Standard questionnaires were issued to importers and consumers of ferro-silicon on the same date. Besides, letters were addressed to the Industrial Adviser, Ministry of Commerce and Industry (Development Wing), New Delhi, and the Iron and Steel Controller, Government of India, Calcutta, requesting them to furnish memoranda on the present position of the industry. Data relating to the c.i.f. prices and landed costs of the latest consignments of ferro-silicon imported into the country were asked for from the Collectors of Customs at the principal ports. A list of persons or bodies to whom questionnaires and letters were issued and from whom replies or memoranda were received is given in Appendix I.

(b) Shri B.N. Adarkar and Shri B.N. Das Gupta, Members, visited the factory at Bhadravati on 24th July, 1953. Shri S.V. Rajan, Assistant Cost Accounts Officer, visited the factory from 16th to 22nd July, 1953 for the purpose of examining the cost of production of ferro-silicon.

(c) A public inquiry into the industry was held at the Commission's Office in Bombay on 10th August, 1953. A list of persons who attended the inquiry is given in Appendix II.

Domestic demand.

5. At the first inquiry held in 1947, the domestic demand for ferro-silicon of all grades was estimated at 3,700 tons per annum. At the 1949 inquiry, the Tariff Board revised the estimate to 3,000 tons per annum. During the present investigation we received widely varying estimates of domestic demand from different parties. The Mysore Iron & Steel Works placed their estimate at 3,000 tons per annum, made up of 2,850 tons for 70-75% grade and 150 tons for 75-80% grade. The Iron and Steel Controller in his memorandum furnished the following estimates for the years 1953 to 1956 :-

	1953	*1954*	*1955*	*1956*
	Tons	Tons	Tons	Tons
Steel Works	4,063	4,146	4,146	4,146
Others including Ordnance Factories and the Railways.	799	1,079	1,214	1,294
	4,862	5,225	5,360	5,440

सत्यमेव जयते

The Tata Iron and Steel Works, the largest consumer of ferro-silicon, estimated their annual consumption at 2,400 tons for the next three years. The Indian Iron and Steel Company estimated their requirements, both present and future, at 700 tons per year. The Mysore Iron and Steel Works require only 200 tons per year for consumption in their works. The estimates received from several other consumers of their requirements are given below:-

Name of consumer	Present requirements (Tons)	Future requirements (Tons)
1. Director General, Ordnance Factories, Calcutta.	180	200
2. The National Iron & Steel Co. Ltd., Calcutta.	140	170
3. Texmaco (Gwalior) Ltd., Gwalior.	90	120
4. Controller of Stores, Western Railway, Bombay.	75	75
5. Mukund Iron & Steel Works Ltd., Kurla, Bombay.	52	65
6. Krishna Steel Industries Ltd., Bombay.	35	35
7. Burn & Co., Ltd., Howrah.	20	20
8. J.K. Iron & Steel Co Ltd., Kanpur.	50	not stated
9. Kumardhubi Engineering Works Ltd., Kumardhubi.	20	-do-
10. Kirloskar Bros. Ltd., Kirloskarwadi.	20	-do-
11. Jamshedpur Engineering and Machine Mfg. Co. Ltd., Tatanagar.	10	10
12. Cooper Engineering Ltd., Satara Road.	6	15
13. Controller of Stores, Central Railway, Bombay.	4	4
14. Richardson & Cruddas Ltd., Bombay.	14	not stated
15 Jossop & Co. Ltd., Calcutta.	6	6
	722	720

The present requirements of all the consumers mentioned above amount to 4,022 tons. There may, however, be several other consumers of ferro-silicon whose requirements are not included in the above statement. On the basis of the available data regarding domestic production and imports, the average consumption of ferro-silicon during the last three years appears to be of the order of 4,000 tons, but there is no doubt that the consumption is gradually increasing and the demand is likely to be higher than 4,000 tons in future. On a careful examination of all the factors, we consider that the domestic demand for ferro-silicon for the next three years may be estimated at 4,500 tons per annum.

Rated capacity.

6. The Mysore Iron and Steel Works have two furnaces at Mysore and one furnace at Bhadravati. As stated in the 1949 Report on this industry, the combined rated capacity of the two furnaces at Mysore is 1,800 tons of 70-75% grade or about 2,500 tons of all grades taken together. These furnaces are not in operation at present. At the 1949 inquiry, the Board was informed that the total rated capacity of the Mysore Iron and Steel Works would be 6,000 to 7,000 tons when the Bhadravati plant would come into operation. At the present inquiry, the producer has furnished us with a revised estimate of the capacity of the furnace at Bhadravati which is 3,770 tons of 70-75% grade per annum. The total rated capacity of the Mysore and the Bhadravati plants taken together, therefore, comes to 5,570 tons of 70-75% grade per annum. This capacity is adequate to meet the domestic demand.

Domestic production.

7. The following statement shows the domestic production of ferro-silicon since 1950:

Year		*Tons*
1950	....	2741
1951	....	2793
1952	....	4069
1953 (January-June)	....	1880

Quality of the indigenous product.

8. The quality of ferro-silicon produced by the Mysore Iron and Steel Works has been found generally satisfactory, though some consumers have complained that the indigenous product shows variations in the percentage of silicon content. This question was discussed at the public inquiry and it was explained that the complaint mostly related to supplies made in the past and that of late both the quality and grading have considerably improved. We understand further that the Mysore Iron and Steel Works and Tatas have agreed to have samples tested at the factory itself by the Government Inspector in future. When these arrangements are finalised, there should be no room for complaints in regard to variations in the percentage of silicon content.

Imports and Import Control.

9. (a) Imports of ferro-silicon are not published separately in the Foreign Trade Accounts, but the Collectors of Customs and the Director-General of Commercial Intelligence and Statistics have been maintaining a record of such imports since September, 1949. According to the figures furnished by the D.G.C.I. & S., imports of ferro-silicon from September, 1949 were as follows:

Year		*Quantity* (tons)	*Value* (Lakh Rs.)
1949—50 (September–March)	...	1,824	10.46
1950-51	...	965	5.62
1951-52	...	685	3.85
1952-53	...	655	9.68

The details showing the sources of imports and the quantity and value of ferro-silicon imported from each source are given in Appendix III.

(b) Imports of ferro-silicon have continued to be restricted since the last inquiry, as recommended by the Tariff Board and licences are being issued subject to the condition that the importer purchases two tons from the Mysore factory for every ton licensed for imports.

Existing rate of protective duty.

10. Ferro-silicon is assessed to duty under Item No. 63(35) of the First Schedule to the Indian Customs Tariff (Thirty-seventh Issue), the relevant extract from which is given below:-

Item No.	Name of article	Nature of duty	Standard rate of duty	Preferential rate of duty if the article is the product or manufacture of			Duration of protective rates of duty
				U.K.	A British colony	Burma	
63(35)	Ferro-silicon	Protective	19-11/16 per cent. *ad valorem*	..	..	Free	December 31st, 1953

Commission's estimate of cost of production.

11. We have examined the data collected by the Assistant Cost Accounts Officer regarding the actual cost of production of ferro-silicon at the new electric furnace at Bhadravati for the year ended 31st March, 1953 and have framed estimates for 1953-54. The details of the cost are given in the Cost Report which is being forwarded to Government as a separate confidential enclosure to this Report. In estimating the future cost, we have assumed that the plant would work for 290 days and would produce 381 tons of 75-80% grade, 2,600 tons of 70-75% grade, 600 tons of 60-70% grade and 400 tons of 45-50% grade. The quantities of raw materials required per ton of ferro-silicon have been estimated by taking into account the actual consumption in 1952-53, the operating efficiency of the plant and the quality of the materials available. The expenses, other than materials, have been allocated in proportion to the number of furnace-working days required for the production of different grades. The average daily output of each grade has been taken to be as follows:-

Grade	Daily output (tons)	
	For future	Adopted in 1949
75-80%	12.7	4.5
70-75%	13.0	5.2
60-70%	15.0	6.0
45-50%	20.0	7.5

The 1949 figures related to the Mysore furnaces which are not in operation at present, while the figures adopted by us relate to the more efficient electric furnace at Bhadravati. The two sets of figures are, therefore, not comparable. The estimates of costs (including return) for different grades arrived at by us are given below with corresponding figures of the fair selling prices adopted by the Tariff Board in 1949. On the present occasion, as explained in paragraph 12 below, we have taken note of certain marketing difficulties experienced by the producer and have determined the fair selling prices of different grades so as to overcome those difficulties. The fair selling prices so determined by us (which are given in para. 12) naturally differ from the estimates of costs (including return) shown below:-

Grade	Cost (including return) per ton as arrived at by us	Fair selling price per ton adopted in 1949
75-80%	Rs. 815/-	Rs. 840/-
70-75%	" 792/-	" 768/-
60-70%	" 705/-	" 673/-
45-50%	" 557/-	" 505/-

To appreciate the reasons for the variations in cost, it would be sufficient to compare the estimates made by us and those adopted by the Board in 1949, in respect of the principal grade 70/75%. The following statement gives comparative details of cost for this grade :-

COST OF PRODUCTION (INCLUDING RETURN) PER TON OF 70/75% GRADE FERRO-SILICON

	As estimated by the Board in 1949.				Actuals (1952-53)			As estimated by the Commission for the future.		
	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Quantity	Rate (Rs.)	Amount (Rs.)	Quantity	Rate (Rs.)	Amount (Rs.)
1	2	3	4	5	6	7	8	9	10	11
1. *Materials:*										
(a) Quartz	Tons	2.49	11.50	28.64	1.782	11.095	19.77	1.782	12.750	22.72
(b) Iron scrap	"	0.33	52.00	17.16	0.410	48.277	19.80	0.379	54.500	20.66
(c) Charcoal	"	2.09	87.00	181.83	1.217	106.813	130.00	1.217	126.500	153.95
Total material cost		-	-	227.63			169.57			197.33
2. Power - Electricity	KWH	11690	0-0-3	182.66	9904	0-0-3.304	170.41	9900	0-0-3.325	171.45
3. Electrode paste	lbs.	255	0.3958	100.94	205.1	0.3473	71.21	205.1	0.407	83.48
4. Labour				58.82			40.23			36.54
5. Repairs, maintenance and consumable stores				35.19			67.92			53.08
6. Ferro-silicon for lining ladles				-			14.61			16.43
7. Establishment				14.75			4.25			4.30
8. Depreciation				12.53			40.80			31.93
9. Other overheads				22.64			66.25			57.99
10. Relining charges				-			9.38			9.41

1	2	3	4	5	6	7	8	9	10	11
11. Packing charges				44.25			34.10			41.00
12. Loading charges				1.09			1.25			1.25
13. Selling expenses				-			2.83			2.46
.TOTAL				700.50			692.81			706.65
14. Interest on working capital				9.17			-			12.65
Total cost				709.67			-			719.30
15. Return on Block				23.10			-			63.06
16. Fair selling prices (1949)/cost including return (future)				732.77			-			782.36
17. Margin for contingencies				35.00			-			10.00
18. TOTAL				767.77			-			792.36
		Say		768			-			792

(1) *Raw Materials:-*

(a) *Quartz:-* The quantity of quartz consumed in 1952-53 worked out to 1.782 tons per ton of ferro-silicon, as against 2.49 tons assumed at the last inquiry. We have adopted the lower figure in our estimate. The savings of Rs. 8.15 per ton of ferro-silicon thus effected is reduced to Rs. 5.92 as a result of the increase in the cost of quartz by Rs. 1.25 per ton.

(b) *Scrap:-* As against the Board's estimate of 0.33 ton of scrap required per ton of ferro-silicon, the actual quantity consumed in 1952-53 was 0.410 ton. Since the Works proposes to make larger use of silicon steel stampings in future, we have estimated the requirements of scrap at 0.379 ton, and this, combined with a small rise in the cost of scrap, has resulted in an increase of Rs. 3.5 in the cost of production per ton of ferro-silicon.

(c) *Charcoal:-* On the basis of the actuals for 1952-53, the quantity of charcoal required per ton of ferro-silicon has been taken at 1.217 tons instead of 2.09 tons adopted at the last inquiry, resulting in a saving of Rs. 75.94 per ton of ferro-silicon. This is, however, reduced to Rs. 27.88 owing to a rise in the cost of charcoal by Rs. 39.5 per ton.

(2) *Electricity:-*

The future estimate is lower by Rs. 11.21 per ton as compared with the 1949 estimate. This is due to the reduction in power consumption by about 1800 units per ton of ferro-silicon, offset by an increase in the cost of power at 0.325 pie per KWH.

(3) *Electrode Paste:-*

The future cost of electrode paste per ton of ferro-silicon is estimated by us at Rs. 83.48 as compared with the 1949 estimate of Rs. 100.94. The reduction of Rs. 17.46 is due to the expected economy in the use of the paste, though the material is now obtained at a slightly higher rate.

(4) *Labour:-*

The estimate for the future provides for normal increments at 3 per cent of the basic wage bill and for production bonus at a revised sliding scale. This estimate is, however, lower than the 1949 estimate by Rs. 22.28 per ton of ferro-silicon because of the economies resulting from an integrated plant and the fact that the production at Bhadravati is much higher than that assumed by the Board for the Mysore plant.

(5) *Repairs, maintenance and consumable stores:-*

The 1949 estimate is not strictly comparable with our estimate which relates to an entirely different type of plant. The plant at Bhadravati has been found to need more frequent repairs, particularly in the power transmission apparatus. The cost of steel castings for the electrode paste is also a major item of expenditure. The total increase in expenditure under repairs and consumable stores taken together is Rs. 17.89 per ton of ferro-silicon.

(6) *Ferro-silicon for lining ladles:-*

This is an item of expenditure which did not arise at the Mysore plant, because the mode of casting at Mysore was different. At Bhadravati, the metal is tapped into cast iron ladles dusted with powdered ferro-silicon. The use of ferro-silicon in this way helps to prolong the life of the refractory materials in the ladles.

(7) *Establishment:-*

The reduction of Rs. 10.45 per ton in this item is due to the fact that unlike the Mysore plant, which was a separate unit, the ferro-silicon unit at Bhadravati is a part of the Mysore Iron and Steel Works.

(8) *Depreciation:-*

Depreciation has been calculated on the written-down value of the block at the income tax rates. The value of the plant at Bhadravati is much higher than that of the

Mysore plant, and consequently the provision for depreciation is higher by Rs. 19.4 per ton of ferro-silicon as compared with the 1949 estimate.

(9) *Other overheads:-*

In 1949 the Board took into consideration only such of the items of overheads as were common to both Bhadravati and Mysore. In the present estimates, however, since the ferro-silicon plant forms part of the main steel works, we have considered it reasonable to include a share of the total overhead expenditure of the steel works in the cost of production of ferro-silicon. The provision under this head has consequently gone up by Rs. 35.35 per ton of ferro-silicon.

(10) *Relining charges:-*

The furnace at Bhadravati has to be relined every three years and provision has, therefore, been made for the estimated expenditure under this head. No such provision was made in the 1949 estimate.

(11) *Packing:-*

The Works was able to reduce its packing charges to Rs. 35.35 per ton of ferro-silicon in 1952-53, as compared with Rs. 45.34 allowed by the Board in 1949. We have, however, allowed Rs. 42.25 for the future since we understand that the Works will be using steel barrels along with wooden barrels in order to improve the packing of the product.

(12) *Selling expenses:-*

No provision was made for selling expenses in the 1949 estimates. Since, however, our object is to determine fair selling prices of ferro-silicon, we have made a suitable provision based on the expenditure of the Sales Department.

(13) *Interest on working capital:-*

This has been allowed at 4½ per cent. per annum on an amount equal to five months' cost of production.

(14) *Return on block:-*

The gross value of the block at Bhadravati comprising the block employed exclusively in the production of ferro-silicon and an appropriate share of the common block of the steel works, amounts to Rs. 23.18 lakhs. Return has been allowed at the rate of 10% on this block. The gross block of the Mysore plant was only Rs. 42,949.

(15) *Margin for contingencies:-*

The Mysore Iron and Steel Works represented that the margin for contingencies should cover (a) the losses of Rs. 85,000 incurred by the Works on account of the Mysore plant, (b) the arrears of Rs. 74,351 claimed by the Electricity Department for the period from April, 1950 to June, 1952 on account of the surcharge on electricity, (c) the possible increase in expenditure under labour and establishment on account of higher dearness allowances and subsidisation of food-stuffs, if the demands made by the Labour Association are conceded, and (d) the expenditure required for developing the production of other ferro-alloys. We do not think that an estimate of the future cost of production of ferro-silicon at Bhadravati can properly include a provision for items (a) and (b) above. Nor have any concrete plans been formulated for expenditure under (d). We agree, however, that it is necessary to provide for some contingent increases in cost on account of labour and other items under (c) above. Although the total incidence of the various demands made by the employees for higher wages, dearness allowances, etc., has been estimated by the producer at Rs. 24/- per ton of ferro-silicon, we consider it reasonable, in view of the increase in the cost of 70/75% grade which has already taken place, to allow a uniform margin of Rs. 10/- per ton only for all grades. The margins allowed at the 1949 inquiry were Rs. 38/- for 75/80%, Rs. 35/- for 70/75%, Rs. 30/- for 60/70% and Rs. 23/- for 45/50%.

Revised pattern of prices.

12. In the preceding paragraph we have given our estimates of the costs of production (including return) of four different grades of ferro-silicon. The estimates so arrived at, however, do not reflect the relative values of the different grades to the consumer, with the result that if the fair selling prices were determined on the basis of these estimates alone, the consumer would not find it economic to purchase anything but the superior grades. It is, therefore, necessary to make a departure from the procedure followed at the last inquiry, when the fair selling prices of the different grades of ferro-silicon were determined only on the basis of the Board's estimates of cost of production. The Mysore Iron and Steel Works represented that while they had no difficulty in disposing of their entire production of 75/80% and also of 70/75% grades, the off-take of 60/70% grade has been extremely poor and that stocks of this grade had accumulated to about 550 tons already. They also stated that there was virtually no demand for powder ferro-silicon of various grades. Our attention was also drawn to the fact that the inferior grades were particularly unattractive to the consumers because they have a tendency to cramble in transit. At the same time, the technique of production in this industry is such that it is not possible to obviate the production of inferior grades altogether. It is necessary, therefore, to devise some means by which the producer will be able to sell the inferior grades and powder as well as the superior grades. We have discussed this matter with the principal consumer, i.e., Tata Iron and Steel Co. who have pointed out that the existing structure of prices makes it uneconomic for consumers to use either the inferior grades or powder. The Mysore Iron and Steel Works, on the other hand, have suggested that orders for ferro-silicon should be so planned as to link the off-take of inferior grades with that of superior grades. We are of the opinion that it would be more desirable to find a solution of this problem through a revision of the price structure than by any administrative measures compelling the consumers to use particular grades.

Tatas have informed us that they have no objection to using the inferior grades, provided their prices are sufficiently lower to off-set the extra cost involved on account of the following factors:

(i) the lower silicon content,

(ii) the extra freight on the larger quantity required to be used,

(iii) the extra handling, crushing and bagging charges, and

(iv) the extra cost of maintaining a higher temperature in the bath in view of the chilling effect of the lower grades.

On account of the differences in the silicon content, one ton of 70/75% grade is roughly equivalent to:-

0.936 ton of 75/80% grade,
1.174 tons of 60/70% grade, and
1.526 tons of 45/50% grade.

The freight from Bhadravati to Jamshedpur is Rs. 162.75 per ton. The extra cost on account of (a) handling, crushing, etc. and (b) the higher temperature required to be maintained in the bath, is estimated at Rs. 11/- per ton of 60/70% grade and Rs. 15/- per ton of 45/50% grade. In the case of 75/80% grade, however, there is a saving on the items (a) and (b) above which is estimated at Rs. 3/- per ton. We understand that the Tata Iron and Steel Co. are willing to use all grades, if the prices are adjusted for the above factors. As regards powder, Tatas are prepared to use it provided it is packed in sealed black sheet containers. The extra cost on account of this packing is estimated at Rs. 56/- per ton. It is estimated that about 10% of the total production is in powder form. In order that the producer may have an inducement to minimise the production of powder and in order that the consumer may also be encouraged to take both lumps and powder, we consider that the price of powder of any grade should be 5% lower than that fixed for lumps of that grade. Taking into account these various factors and the estimated costs, we consider that the following pattern of prices would be fair to both the producer and the consumers:-

Grade	Production	Fair selling price per ton f.o.r. Bhadravati
75/80% Lump	343 tons	Rs. 890
Powder	38 tons	Rs. 845
70/75% Lump	2340 tons	Rs. 820
Powder	260 tons	Rs. 779
60/70% Lump	540 tons	Rs. 663
Powder	60 tons	Rs. 630
45/50% Lump	360 tons	Rs. 466
Powder	40 tons	Rs. 443
All grades, all types.	3981 tons	Rs. 763.67

It will be observed that at the prices suggested above it will no longer be uneconomic for the consumers to use the various lower grades whether in lump or in powder and that the over-all realisation by the producer per ton of the product will also be approximately equal to the weighted average fair ex-works price per ton as determined by us. It may be noted that the allowances for freight, handling charges, etc. taken in the above calculations are based on the data received by us. Should the conditions change in regard to any of these factors, the price pattern will need corresponding revision.

C.i.f. prices and landed costs.

13. A statement showing the c.i.f. prices and landed costs of ferro-silicon imported into the country since 1950 is given in Appendix IV. The latest c.i.f. price relating to actual imports is for September, 1952. As this may not be representative of current conditions, we have decided to adopt the

current export price of ferro-silicon from U.K. and to work out the c.i.f. price on that basis. We understand that the current export price of ferro-silicon 70-84% grade of British manufacture is £. 86 per ton f.o.b. English port which is equivalent to Rs. 1,146-10-0. Adding ocean freight at Sh. 330/- per ton and marine insurance at 1 per cent on the cost and freight, the c.i.f. price at an Indian port will work out to Rs. 1,380-10-0 and the landed cost to Rs. 1,662-10-0 as follows:-

F.O.B. price	...	Rs. 1,146-10-0
Ocean freight	...	Rs. 220- 0-0
Marine Insurance	...	Rs. 14- 0-0
C.I.F. price	...	Rs. 1,380-10-0
Customs duty at 19-11/16 per cent.	...	Rs. 272- 0-0
Clearing charges	...	Rs. 10- 0-0
Landed cost at an Indian port	...	Rs. 1,662-10-0

Comparison of the landed cost of the imported product with the Commission's estimate of fair selling price of the indigenous product.

14. Having determined the appropriate fair selling prices for the various grades of indigenous ferro-silicon, we have now to consider how they compare with the landed costs of the imported product in order to decide whether the domestic industry is still in need of protection. In paragraph 13 above, the latest c.i.f. of ferro-silicon of British manufacture 70/84% grade is given as Rs. 1,380-10-0 per ton. On the basis of this c.i.f. price, the landed cost at Calcutta comes to Rs. 1,662-10-0 per ton. Since Tatas are the principal consumer of ferro-silicon, it is reasonable to compare the cost of imported and indigenous ferro-silicon landed at Jamshedpur. The following statement provides the necessary data:-

(a)	C.i.f. price at Calcutta port	Rs.	1,380-10-0
(b)	Customs duty at 19-11/16%	"	272- 0-0
(c)	Clearing charges	"	10- 0-0
(d)	Landed cost at the port of Calcutta....	"	1,662-10-0
(e)	Railway freight from Calcutta to Jamshedpur	"	26-13-0
(f)	Landed cost at Jamshedpur	"	1,689- 7-0
(g)	Landed cost at Jamshedpur ex-duty	"	1,417- 7-0
(h)	Fair selling price of 70/75% grade as estimated by us, f.o.r. Bhadravati	"	820- 0-0
(i)	Add freight from Bhadravati to Jamshedpur	"	162-12-0
(j)	Price of indigenous ferro-silicon at Jamshedpur (h+i)	"	982-12-0
(k)	Difference between the price of indigenous ferro-silicon and the landed cost, without duty, of the imported ferro-silicon at Jamshedpur (g - j)	"	(-) 434-11-0
	Difference as a percentage on the c.i.f. price.		31.5%

(Margin in favour of the indigenous industry)

Question of continuance of protection.

15. It will be seen that the cost of a representative grade of imported ferro-silicon, without duty, at Jamshedpur exceeds the fair selling price of a similar grade of indigenous ferro-silicon by Rs. 434-11-0 per ton. So long as the prices of imported ferro-silicon remain so high as they are at present in relation to the fair selling prices of indigenous ferro-silicon, the domestic industry will meet with no foreign competition whatever. We, therefore, recommend that the protection granted to this industry need not be continued beyond 31st December, 1953. Should the conditions change and the industry again find itself unable to meet foreign

competition, it may apply for a fresh examination of its case.

16. Our conclusions and recommendations are summarised as under:-

Summary of conclusions and recommendations.

(1) The demand for ferro-silicon of all grades is estimated at 4,500 tons per annum for the next three years (Paragraph 5).

(2) The total rated capacity of the Mysore and Bhadravati plants taken together comes to 5,570 tons of 70/75% grade per annum (Paragraph 6).

(3) The Mysore Iron and Steel Works produced 2,741 tons of all grades of ferro-silicon in 1950, 2,793 tons in 1951, 4,089 tons in 1952 and 1,880 tons in the first six months of 1953 (Paragraph 7).

(4) The quality of indigenous ferro-silicon has been found generally satisfactory (Paragraph 8).

(5) The fair selling prices f.o.r. Bhadravati for different grades of ferro-silicon as determined by the Commission are as follows:-

सत्यमेव जयते

Grade		Rupees per ton
75/80%	Lump	890
	Powder	845
70/75%	Lump	820
	Powder	779
60/70%	Lump	663
	Powder	630
45/50%	Lump	466
	Powder	443

(Paragraph 12).

(6) The landed costs of imported ferro-silicon exceed the fair selling prices of indigenous ferro-silicon by

a substantial margin. The protection granted to this industry, therefore, need not be continued beyond 31st December, 1953. Should the conditions change and the industry find itself unable to meet foreign competition, it may apply for a fresh examination of its case (Paragraph 15).

Acknowledgments.

17. We wish to express our thanks to the representatives of producers, importers and consumers for furnishing us with valuable information and giving evidence before us.

B.V. NARAYANASWAMY,
Member.

B.N. ADARKAR,
Member.

B.N. DAS GUPTA,
Member.

D.K. MALHOTRA,
Secretary.

Bombay
Dated 18th September, 1953.

सत्यमेव जयते

APPENDIX I

[*Vide* paragraph 4(a)]

List of persons, firms or other organisations to whom the Commission's questionnaires were issued and from whom replies or memoranda were received.

* Indicates those who have replied to the questionnaire or submitted memoranda.

** Indicates those who are not interested.

A. PRODUCER:

* The Mysore Iron and Steel Works, Bhadravati.

B. IMPORTERS:

** 1. The East Asiatic Co. (India) Ltd.,
P.B. 146, Mercantile Bank Building,
1st Line Beach, Madras.

* 2. Ferro-Alloys & Metals Ltd.,
Liberty Buildings,
41, Marine Lines, Bombay-1.

3. The Indian Standard Metal Co., Ltd.,
Chinchpokli Cross Lane, Bombay-27.

** 4. International Sales Corporation Ltd.,
23/90, Connaught Circus, New Delhi.

* 5. Industrial Importers Ltd.,
P.O. Box No. 2353, Calcutta.

** 6. William Jacks & Co., Ltd.,
16, Netaji Subhas Road, Calcutta.

7. Sepulchre & Co., Ltd.,
4, Mission Row, Calcutta.

C. CONSUMERS:

* 1. The Controller of Stores, Western Railway,
General Office, Churchgate, Bombay-1.

* 2. Burn & Co., Ltd.,
Howrah Iron Works, Howrah, West Bengal.

* 3. Cooper Engineering Ltd.,
Satara Road, Satara District.

C. CONSUMERS (Contd.)

* 4. Director General of Ordnance Factories,
6, Esplanade East, Calcutta-1.

5. The Controller of Stores, E.I. Railway,
Jamalpur.

** 6. G.T.R. Co., Ltd.,
12, Netaji Subhas Road, Calcutta.

* 7. Indian Malleable Castings Ltd.,
4, Lyons Range, Calcutta.

8. Indian Hume Pipe Co., Ltd.,
Wadala, Bombay.

* 9. Jamshedpur Engineering & Machine Mfg. Co., Ltd.,
Tatanagar.

* 10. Jessop & Co., Ltd.,
63, Netaji Subhas Road, Calcutta-1.

* 11. J.K. Iron & Steel Co., Ltd.,
Kamla Tower, Kanpur.

* 12. Kirloskar Brothers Ltd.,
Kirloskarvadi, Satara District.

* 13. Kumardhubi Engineering Works Ltd.,
P.O. Kumardhubi, Manbhum District.

14. Metal & Steel Factory,
Ishapore, 24 Parganas.

* 15. Mukand Iron & Steel Works Ltd.,
Bombay-Agra Road, Kurla, Bombay.

* 16. The National Iron & Steel Co., Ltd.,
Stephen House, 4, Dalhousie Square,
Calcutta.

17. Ordnance Factory, Muradnagar,
U.P.

18. Ordnance Factory, Kalpi Road,
Kanpur.

* 19. Richardson & Cruddas,
Byculla Iron Works, Bombay.

* 20. The Indian Iron & Steel Co., Ltd.,
12, Mission Row, Calcutta.

* 21. The Tata Iron & Steel Co., Ltd.,
24, Bruce Street, P.O. Box No. 378,
Fort, Bombay.

C. CONSUMERS (Contd.)

* 22. Texmaco (Gwalior) Ltd., P.O. Birlanagar,
Gwalior.

* 23. Krishna Steel Industries Ltd.,
301, Musjid Bunder Road, Bombay.

24. K.T. Steel Industries Ltd., Opp. Victoria Docks,
Blue Gate, P.O. Box No. 5052, Bombay-9.

* 25. The Controller of Stores, Central Railway,
Administrative Office, V.T. Bombay.

APPENDIX II

[*Vide* paragraph 4(c)]

List of persons who attended the public inquiry held on 10th August, 1953.

PRODUCER:		
1. Mr. S. Muninanjappa 2. Mr. H. Chickanna	Representing	The Mysore Iron & Steel Works, Bhadravati.
IMPORTER:		
Mr. F.A. Jasdanwala	-do-	Indian Standard Metal Co., Bombay.
CONSUMERS:		
1. Mr. S.N. Sircar 2. Mr. K.M. Madan	-do-	The Tata Iron & Steel Co., Ltd., Bombay.
3. Mr. K.B. Sethna	-do-	Indian Iron & Steel Works, Ltd., Calcutta.
4. Mr. B.V. Shah	-do-	Mukund Iron & Steel Co., Ltd., Bombay.
5. Mr. N.C. Killavala	-do-	Western Railway, Bombay.
6. Mr. S.G. Ghosalkar	-do-	Central Railway, Bombay.

APPENDIX III

[*Vide* paragraph 9(a)]

STATEMENT SHOWING IMPORTS OF FERRO-SILICON FROM 1949-50 (SEPTEMBER-MARCH) TO 1952-53

Origin of import	1949-50 (Sept.-Mar.)		1950 - 51		1951 - 52		1952 - 53	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	Tons	Lakh Rs.	Tons	Lakh Rs.	Tons	Lakh Rs.	Tons	Lakh Rs.
Norway	1824	10.46	965	5.62	632	3.32	-	-
United Kingdom	-	-	-	-	11	0.11	-	-
France	-	-	-	-	42	0.42	-	-
Austria	-	-	-	-	-	-	2	0.03
U.S.A.	-	-	-	-	-	-	653	9.65
Total	1824	10.46	965	5.62	685	3.85	655	9.68

APPENDIX IV

[*Vide* Paragraph 13]

STATEMENT SHOWING THE C.I.F. PRICES AND LANDED COSTS OF FERRO-SILICON

Source of Information	Origin of import	Date of import	Type and specification	C.i.f. price per ton			Landed cost		
				Rs.	As.	Ps.	Rs.	As.	Ps.
Industrial Importers Ltd., Calcutta.	Norway	Nov., 1950	73%	616	0	0	752	5	0
Ferro-Alloys & Metals Ltd., Bombay.	Canada	Oct., 1951	90-95%	2,603	7	0	3,149	1	0
Tata Iron and Steel Co., Ltd., Bombay.	U.S.A	11-3-1952	75-80%	1,567	0	0	1,883	5	8
Collector of Customs, Calcutta.	U.S.A.	Sept., 1952	75%	1,485	0	0	1,785	0	0